

## MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Automation of Configuration Management, Engineering Change Proposal Processes and the Technical Loop

1. For years, our engineering and technical data systems, as a whole, have not kept pace with the emerging technologies resulting in several organizations undertaking unilateral initiatives to achieve local short term efficiencies. As a result, this has created nonstandard practices across the commands leading to long term inefficiencies associated with duplicative cost and maintenance/support cost of these unique systems. We must look to the future for long term efficiencies. We cannot be successful in achieving long term Acquisition Reform efficiencies without significantly reducing Administrative Lead Time (ALT) and Procurement Administrative Lead Time (PALT). Our engineering and technical data management systems are one of the "long poles" in achieving these required efficiencies. The results of the recent FAA Phase II effort highlighted these inconsistencies and recommended AMC standardize the engineering and technical data systems across the commands so that savings could be realized. The FAA recommendation was approved by the CG HQAMC and the Industrial Engineering Activity (IEA) was given the lead for this action.

2. A major problem with unique initiatives is the duplicative costs incurred, possible inability to exchange information and the significant cost of future maintenance and support of these unique initiatives. As we are currently experiencing with the BRAC action at the U.S. Army Aviation and Troop Command, the transfer of functions, file types and data are extremely complicated when the data, systems and processes have not been standardized. Many efficiencies can be realized by standardizing data and systems, while allowing for some systems uniqueness and variation in the processes.

3. To this end, the Engineering Data Management Systems (EDMS) Functional Coordinating Group (FCG), chaired by IEA, is undertaking an effort to develop a Performance Specification (PS)

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for Configuration Management (CM) process, to include Engineering Change Proposals (ECPs), and the engineering Technical Loop (TL).

This PS will look to the future of these processes under the Acquisition Reform initiatives and identify the requirements for close integration with the procurement process. Maximum possible use will be made of previously accomplished actions, e.g., Joint Logistics Systems Center Business Process Models, documented functional requirement of existing systems and unique initiatives, etc. Upon completion of this PS, the Program Manager for EDMS will undertake the development and/or integration of systems compatible with the Integrated Data Environment infrastructure where possible and cost effective to provide a standardized system for CM, ECPs, and TL which will interface to Joint Engineering Data Management Information Control System. This will allow for achievement of significant efficiencies in ALT and PALT reduction while minimizing the future maintenance and support cost.

4. This action will require the relooking of funding priorities and possibly some reallocation of funding to make it happen. Additionally, as the EDMS FCG moves forward it will require support and assistance from personnel throughout the Command to achieve its objectives. This support and assistance will initially be in the form of providing information and data, but as the PS matures some dedicated support in finalizing the PS will probably be required. This is another demand on already scarce resources, but it is a sacrifice that must be made if we are to be able to survive in the times ahead.

5. The points of contact are Mr. James Knowles, HQ AMC, AMCRDA-TE, DSN 767-5100 or (703) 617-5100, e-mail: jknowles@hqamc.army.mil and Mr. Gordon Ney, AMXIB, DSN 793-6586 or (309) 782-6586, e-mail: gney@ria-emh2.army.mil.

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6. AMC -- America's Arsenal for the Brave.

FOR THE COMMANDER:

/s/  
ROY E. BEAUCHAMP  
Major General, USA  
Deputy Chief of Staff

for Research, Development  
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Colonel Richard Ross, Commander, U.S. Army Soldier Systems  
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COMMENTS NOT ACCEPTED

martinep @ cc.tacom.army.mil on 05/12/97 07:22 AM AST - TACOM-TARDEC

I also think the milestone to have something in place for Y2K needs to be mentioned since we are not getting any funding to keep our systems afloat for the turn of the century. If it is not anticipated to be completed by then, funding MUST be made available to convert existing systems for compliance.

CONSIDERED BUT REJECTED: Y2K is being worked as a separate project for all systems.

winfielm @ cc.tacom.army.mil on 05/12/97 01:04 PM AST - TACOM - TARDEC

As a member of the TACOM CM team I concur. However, as BPM for Product Definition, I have some concern about the EDMS FCG taking over the tech loop responsibility. As BPM for Product Definition, I non-concur for the plain and simple reason that no mention is made of the role that the Product Definition BPG will play in development of the PS for the tech loop, in fact, there is no mention of the PD BPG at all. If this memo is sent out as is, I would take it as the direction to disband the Product Definition Business Area as the EDMS FCG is taking responsibility for the tech loop.

CONSIDERED ("engineering" added in front of Technical Loop) BUT REJECTED AS A WHOLE: The "tech loop" is the loop formed when a repository is notified of a procurement requirement requiring "technical" data, initial package is pulled, sent to engineering for update, validated and returned to the repository. The Product Definition Support System is to support the acquisition front end.

uldrich @ doim6.monmouth.army.mil on 05/12/97 02:33 PM AST - CECOM

We recognize the urgent need for development of requirements and presume that the suggestions put forward at the 7 May 97 ACMS meeting to examine the CECOM efforts with PDM will be incorporated into the decision process. CECOM's efforts in this area were acknowledged as groundbreaking and should not be ignored lest we incur redundant costs during this process.

Because any CM solution becomes the basis of information organization for more than technical data in an integrated data environment, the PM EDMS provides too narrow of a focus on solely engineering data. We believe that the development of a standardized CM methodology should not be a single functional area solution. Such an approach would not benefit from the

information solutions being developed by CECOM for both tactical and non-tactical data. We recommend that the decision for development responsibility be held in abeyance until the data gathering is completed and the procurement specification is written and agreed upon by all parties.

We do not concur with this memo as written.

CONSIDERED BUT REJECTED: These comments offer no added value and would serve only to slow the process. If the "information solutions being developed by CECOM for both tactical and non-tactical data" are properly coordinated with the PM EDMS, then any approach should "benefit from the information solutions being developed by CECOM for both tactical and non-tactical data."

tschne @ ria-emh2.army.mil on 05/12/97 02:25 PM CST - IEA

IEA proposed a rewrite of the memo (attached). Primarily the 1st paragraph.

CONSIDERED BUT REJECTED: AMSAA proposed a rewrite of the 1st paragraph. This was generally accepted. Neither rewrite changes the basic content of the memo, but AMSAA's appears to be a politically correct move.

lac @ arl.mil on 05/13/97 02:44 AM AST - AMSAA

Para 1&2:

"In the past, Our engineering and technical data systems, as a whole, have not keep pace with emerging technologies which have resulted in several organizations undertaking unilateral initiatives to achieve efficiencies in the Technical Loop and Product Data Management (CM Status Accounting Systems/Data Repository Systems) arenas. As a result, this has created nonstandard practices across the commands ultimately leading to long term inefficiencies associated with duplicative cost and maintenance/support cost of these unique systems. The results of the recent FAA Phase II effort highlighted these inconsistencies and recommended AMC standardize the engineering and technical data systems across the commands so that savings could be realized. The FAA recommendation was approved by the CG HQAMC and the Industrial Engineering Activity was given the lead for this action."

Second comment - Need to indicate that current fielded systems could be potential candidates meeting the new performance spec.

CONSIDERED AND GENERALLY ACCEPTED.

IEA rewrite:

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The Joint Logistics Systems Center (JLSC) has not delivered engineering and technical data systems that meet AMC needs; and, as a consequence, our systems have not kept pace with the emerging technologies. Only the Joint Engineering Data Management Information and Control System (JEDMICS) has progressed in a uniform standardized manner. While several organizations have undertaken individual initiatives that are achieving short term savings, AMC must now look toward our future by establishing more uniform systems for long term efficiencies across all of Army. The continuing decline in available resources mandates that we achieve these efficiencies. We must be able to store and manipulate technical data electronically in a wide variety of contractor formats. We must be able to quickly locate data within our repositories. And most importantly, we cannot be successful in achieving long term Acquisition Reform efficiencies without significantly reducing Administrative Lead Time (ALT) and Procurement Administrative Lead Time (PALT). Our engineering and technical data management systems are one of the "long poles" in achieving these required efficiencies.

A major problem with MSC unique initiatives is: the duplicative costs incurred; possible inability to exchange information; and the significant cost of future maintenance, and support of these unique initiatives. As we are currently experiencing with the BRAC action at the U.S. Army Aviation and Troop Command, the transfer of functions and data are extremely complicated when the data, systems and processes have not been standardized. Many efficiencies can be realized by standardizing data and systems, while allowing some tailoring in the processes.

To this end, the Engineering Data Management Systems (EDMS) Functional Coordinating Group (FCG) is undertaking an effort, known as the Automated Configuration Management System (ACMS). Its purpose is to develop a Performance Specification (PS) for Configuration Management (CM) including Engineering Change Proposal (ECP) processing and the Technical Loop (TL) process. This PS will identify the requirements for functionality and interfaces, particularly requiring a close integration with the procurement process. Maximum possible use will be made of previously accomplished actions, e.g. JLSC Business Process Models, documented functional requirement of existing systems and unique initiatives, etc. Upon completion of this PS, the Program Manager for EDMS will undertake the development, procurement and/or integration of systems using the Integrated Data Environment infrastructure where possible to provide a generally standardized system for CM, ECPs, and TL which will interface to JEDMICS. This effort will allow for achievement of significant efficiencies in ALT and PALT reduction while

minimizing the future maintenance and support cost.

This action will require the reassessing of funding priorities and possibly some reallocation of funding to make it happen. Additionally, as the EDMS FCG moves forward it will require support and assistance from personnel throughout the Command to achieve its objectives. This support and assistance will initially be in the form of providing information and data, but as the PS matures some dedicated support in finalizing the PS will probably be required. This is another demand on already scarce resources, but it is a sacrifice that must be made if we are to be able to survive in the times ahead.

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